

AR43

# FATHOM OCEANOLOGY LIMITED

## 1974 ANNUAL REPORT

FOR THE YEAR ENDED MARCH 31, 1974

**Directors**

\*K. R. OLSEN, Hudson, Quebec.  
President, Fathom Oceanology Limited,  
Vice President, Atlas Construction Limited,  
President, G. M. Gest Ltd. & Subsidiaries.

\*R. L. I. FJARLIE, Maxville, Ontario.  
Executive Vice President, Fathom Oceanology Limited.

\*N. E. HALE, Mississauga, Ontario.  
Vice President Engineering, Fathom Oceanology Limited.

\*J. B. FOOTE, Markham, Ontario.  
Marketing Manager, G. F. Business Equipment Incorporated.

K. GARDNER, Mississauga, Ontario.  
Vice President Marketing, Fathom Oceanology Limited.

S. G. JACKSON, Beaconsfield, Quebec.  
President, Beak Consultants Limited.

J. E. NORDIN, Montreal, Quebec.  
General Manager, Quebec Region, Industrial Development Bank.

\*Member of the Executive Committee

**Officers**

K. R. OLSEN, President  
R. L. I. FJARLIE, Executive Vice President  
N. E. HALE, Vice President  
K. GARDNER, Vice President  
J. O. EMPEY, Vice President  
D. W. FAIRLES, Treasurer and Financial Controller  
R. A. DONALDSON, Secretary

**Head Office and Plant**

863 Rangeview Road, Port Credit, Ontario.

**Subsidiary Company**

Hale and Associates Limited, Port Credit, Ontario.

**Transfer Agent and Registrar**

National Trust Company Limited, Toronto, Ontario and Calgary, Alberta.

**Banker**

Bank of Montreal, Toronto, Ontario.

**Auditors**

Clarkson, Gordon & Co., Toronto, Ontario.

**Legal Counsel**

Blake, Cassels & Graydon, Toronto, Ontario.

The annual meeting of the shareholders of  
Fathom Oceanology Limited will be held  
in the Algonquin Room of the Royal York  
Hotel, Toronto at 2:00 P.M. on the 28th  
day of August 1974.

**FATHOM**  
OCEANOLOGY LIMITED

AR43



SEMI-ANNUAL REPORT  
TO SHAREHOLDERS  
(UNAUDITED)

FOR SIX MONTHS ENDED  
SEPTEMBER 30, 1974

# TO THE SHAREHOLDERS

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## Consolidated Statement of Operations

For the Six Months Ended September 30th, 1974  
(With Comparative Figures for the Six Months Ended September 30, 1973)

	1974 \$	1973* \$
Revenue	407,736	414,903*
Costs	388,450	345,554
Manufacturing		
Administrative (includes interest expenses of \$22,852 in 1974, \$22,269 in 1973)		
Less recovery of costs – D.I.P. program	138,472	120,923
Net cost	526,922	466,477
(Loss) earnings	7,499	61,217
	519,423	405,260
	(111,687)	9,643
	(\$0.07)	\$0.01

The orders booked and the work on hand has steadily risen to the point where the Company is able to maintain operations without the need of Government Grants.

The first towing system for the Government of Brazil was shipped last August and passed all of the stringent factory acceptance tests.

Additional work on hand includes an important contract for the Royal Netherlands Navy for substantial modifications to their existing sonar equipment now incorporating Fathom patents. Another important contract received during this period was from the Royal Canadian Navy for the redesign of some existing equipment.

## Consolidated Statement of Changes in Financial Position

For the Six Months Ended September 30th, 1974  
(With Comparative Figures for the Six Months Ended September 30, 1973)

	1974 \$	1973 \$
FUNDS RECEIVED FROM:		
Issue of common shares		
	178,197	
FUNDS RECEIVED FROM:		
Operations—		
Net loss (earnings) for the period	111,687	(9,643)
Deduct (add) charges to operations not involving an outlay of working capital—		
Depreciation and amortization		
Funds applied to (received from) operations	26,700	(22,800)
Purchase of fixed assets	84,987	(32,443)
Cost of patents	17,394	40,625
Reduction in long term debt	1,479	10,040
	4,058	2,738
Total funds applied	107,918	20,960
INCREASE (DECREASE) IN WORKING CAPITAL	70,279	(20,960)
WORKING CAPITAL (DEFICIENCY), beginning of period	(192,651)	95,750
WORKING CAPITAL (DEFICIENCY), end of period	(122,372)	74,790

\*NOTE: The over-accumulation of revenue of \$184,000 reported to the shareholders on February 21, 1974 largely occurred during this six month period in 1973.

*Concurrent with the above statement of changes in financial position*

*For the Six Months Ended September 30th, 1974*

*(With Comparative Figures for the Six Months Ended September 30, 1973)*

*For the Six Months Ended September 30th, 1974*

*(Unaudited)*

*For the Six Months Ended September 30th, 1973*

*(Audited)*

*Kane Olsen*

K. R. OLSEN, P. Eng.  
President.

November 29, 1974

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## To the Shareholders of Fathom Oceanology Limited

### Summary of Results

Contracts received during the year were up nearly 500% over 1973. A total of 54 contracts were written amounting to a value of \$731,000. This compares with a total of 34 contracts worth \$150,000 for 1973.

Revenue from sales for the year rose by 45% to \$641,000 from \$441,000.

The loss for the year of \$246,540 or 21¢ a share compares with \$29,250 or 2½¢ a share for 1973.

### Completed Contracts and Work in Progress

The most significant orders were for a sonar dome—the first of a new generation of sonar for the United States Navy frigate fleet; an oil and gas exploration towing system for Columbia Gas Inc. and a prototype modification kit to update the Royal Netherlands Navy variable depth sonar towing capability.

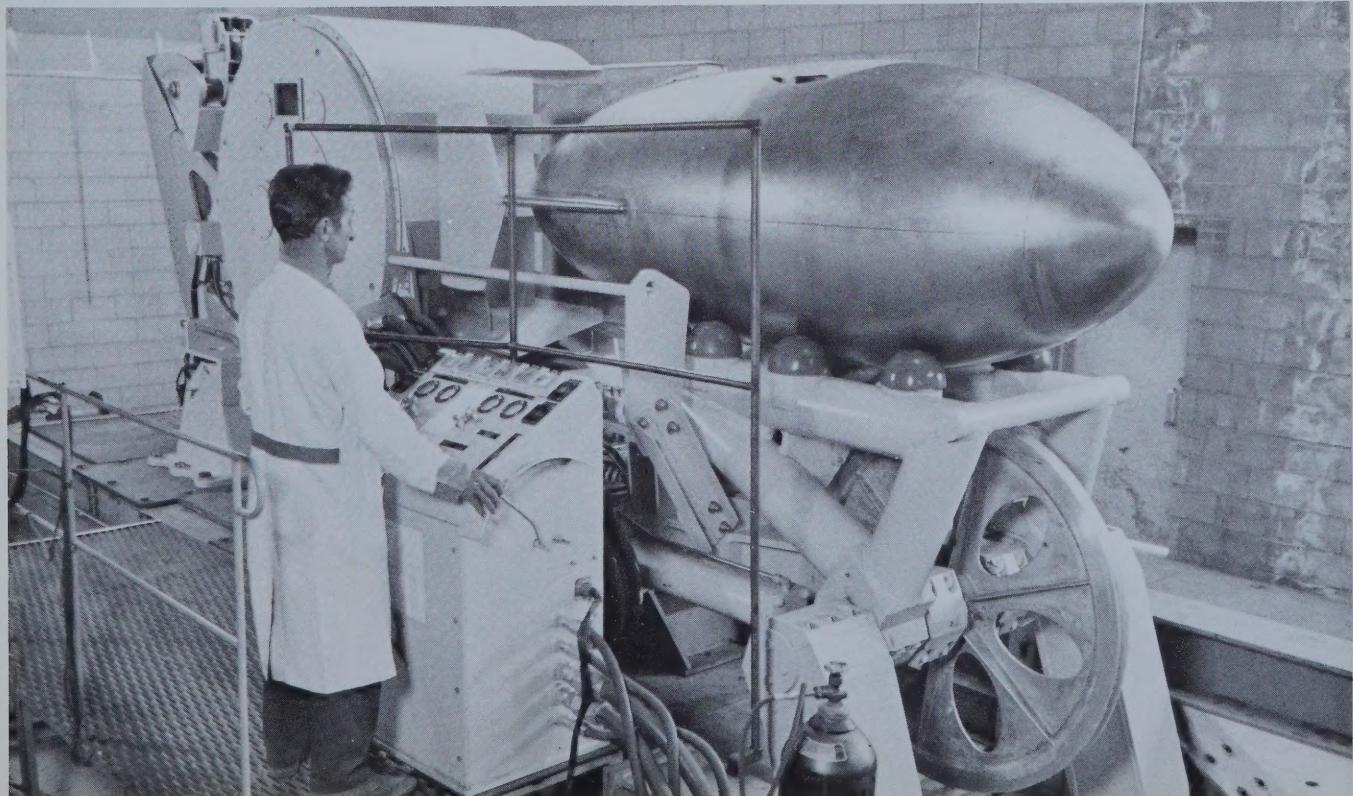
Work in the plant centred on the production of these units and upon the continued construction of the large systems for the Brazilian Navy ordered in 1971.

Engineering contracts included project "Deeptow" for the Government of West Germany: the "Flits" system for small ships programmes and a further development project for the United States Navy on submarine antenna systems.

Project "Deeptow" has three phases. The first is a design and feasibility study, the second detailed design and tooling and the third, actual construction. This is a very large project utilizing two Fathom systems mounted in tandem. The general arrangement is shown in the photograph of the model reproduced here. The feasibility study is finished and was presented by Fathom to the Ministry of Science of West Germany in Bonn in June 1974. Contracts for phases two and three are now being negotiated.

The "Flits" system, or the Fathom Lightweight Integrated Towing System, is a further development of the standard Fathom System but modified for

*One of two systems ordered by the Brazilian Navy undergoing tests in the Port Credit plant on the Company's ship ocean simulator.*



below deck mounting and for use on small vessels with limited deck space. This system ties in closely with the requirements of the teaming agreement with the Bendix Corporation in the United States for the model -600B announced last year. This initial contract called for conceptual design work and this is now complete.

The submarine antenna system for the United States Navy is also a multiphase project. Phase one, the feasibility study, was completed in the summer of 1973. Phase two, the detailed design, was completed in June 1974. Phase three, which will be the production of the prototype, is now being negotiated.

The value of the work on hand on April 1st, 1974 was \$419,000. This compares with \$579,000 on the same date in 1973.

### Financial Affairs

There are three causes for the loss this year. They are: underaccrual of production against progress payments at a particular point in time on a major contract extending over more than a year's duration;

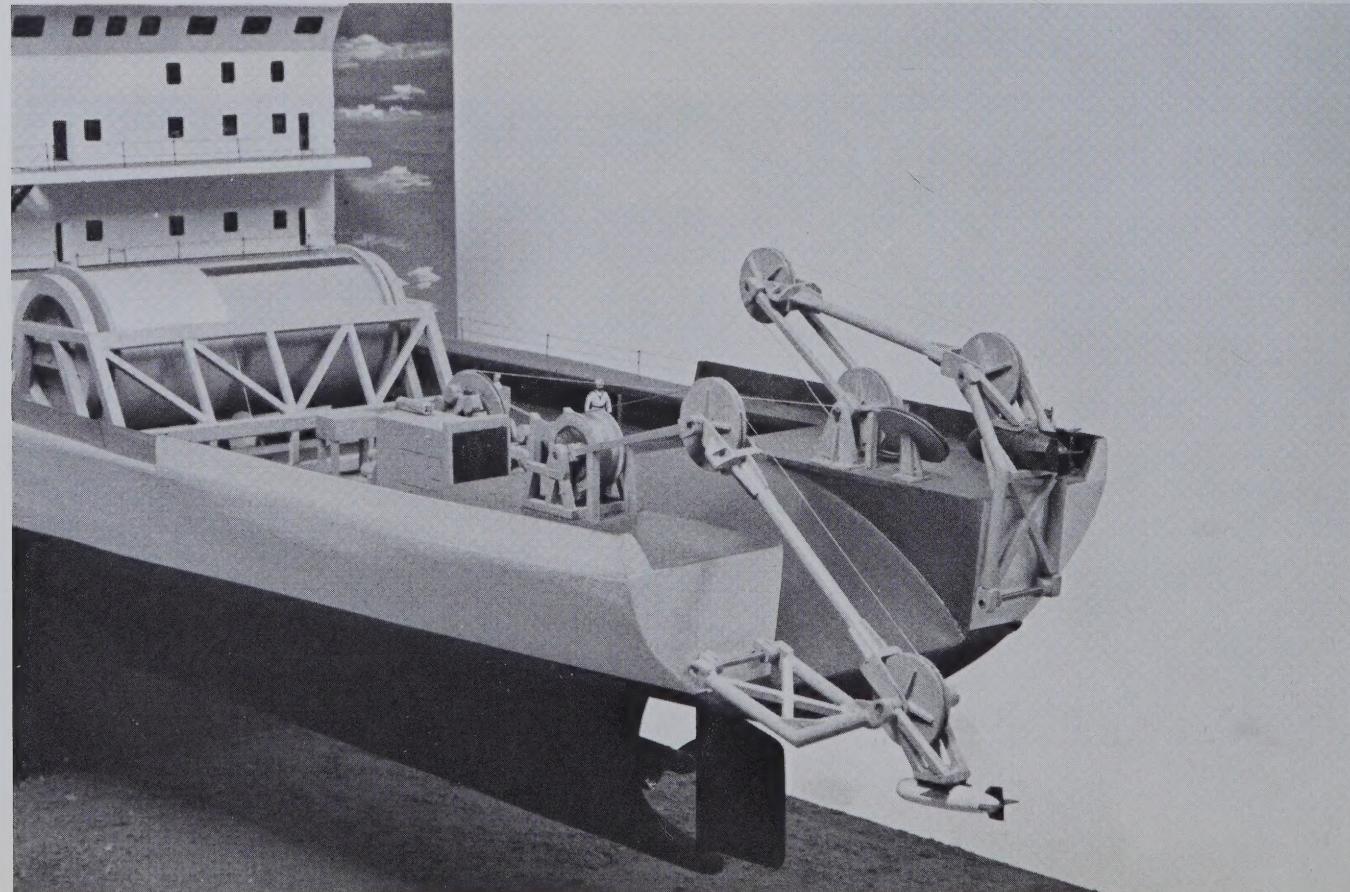
inflation of material and service cost in excess of estimates; and the fact that the company must bear the expenses of a highly skilled team of key personnel in all phases of the operation and its involvement with customers in many parts of the world.

In spite of the most stringent controls some production problems will always be attendant. As for the inflationary trend, this is a problem of the times and the company has already instituted modified contract escalation clauses to safeguard it in future transactions. As for the expenses of key personnel there is little choice. These people are the heart of the business and the ever increasing cost of having them attend customers, especially those in Europe, is unavoidable.

Progress towards better stability was made in the last year. The bar chart here shows a significant change in the company's source of revenue in 1974 over previous years.

Shareholders equity which shows a negative position at year end is based upon the conservative

*A model of project 'Deeptow' for the Ministry of Science of West Germany. It utilizes two Fathom Systems mounted in tandem.*



accounting procedure of writing off all development work in the year it is incurred. Consequently the "completed engineering designs" asset that appears on our balance sheet is shown at the nominal value of \$1. It should, however, be understood that the value of the asset, which has been shared equally between Fathom and the Federal Government is in fact \$1,120,000.

These designs, developed and paid for in the production of early prototypes, and often causing losses to be recorded, are now being used again for profitable repeat business. The revenue accrued from this component of total revenue jumped 300% to \$400,000 last year.

Revenue from the sale of prototypes, that is newly designed equipment rather than repeat business, was slightly below last year's figure. Government assistance, which the company received in 1972 and 1973, dropped 66% to \$75,000 from \$227,000.

### The Outlook

The long-term outlook for Fathom Oceanology Limited is good. Unless there is a world depression, it cannot be viewed any other way. The Company's product is known and accepted throughout the world by all who have need for its use. The company has several million dollars worth of tenders outstanding, many of which are expected to become orders. Getting these orders at a time to suit Fathom's convenience is one of its major problems. There is little that Fathom can do that has not already been done to bring in this business more quickly than suits the customer's need.

Until some of these orders are placed and the company can establish a broader base to balance fixed expenses, overall profits will continue to be elusive.

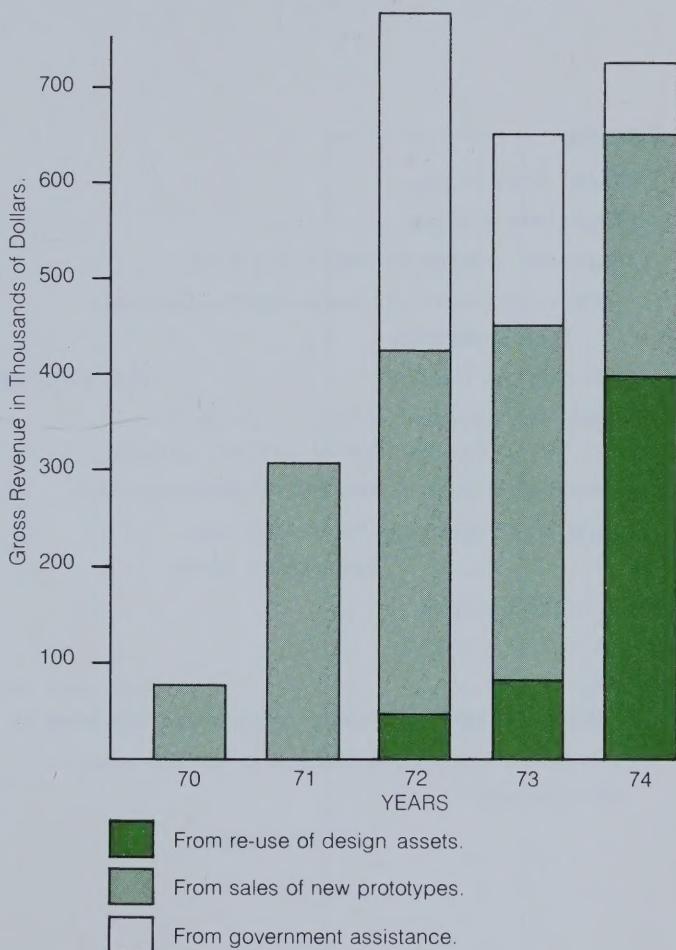
### Board of Directors

The Board of Directors is pleased to welcome the appointment of Mr. Jack Nordin as a Director of the Company. In April 1974 the Industrial Development Bank acquired an equity position in Fathom Oceanology Limited and Mr. Nordin was elected as its representative.

### Staff

In April 1974 the company replaced its Controller. Mr. D. W. Fairles, who was previously on the staff of the

**SOURCE OF REVENUE**  
(Including government assistance)



company's auditors, now holds this key position as Treasurer and Financial Controller.

The total number of staff at the close of the financial year was 32. In the five years that the company has been in business, a team of dedicated people has designed, produced, and sold, in an international market a product that is not available from any other source. This team is motivated by a belief that the technology and products it has created, have not only met objectives but have often performed beyond the expectations of the purchasers. To the people of this team, the Directors express their thanks.

By order of the Board of Directors.

*Haare, Olsen*

K. R. Olsen,  
President.

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## Consolidated Balance with comparative figures

### Assets

#### CURRENT ASSETS:

	1974	1973
Short term deposit .....	—	\$150,000
Accounts receivable (notes 3 and 6(a)) .....	\$176,740	12,682
Grants receivable from Government of Canada—		
D.I.P. (note 4(a)) .....	11,139	35,979
I.R.D.I.A. .....	7,500	73,154
Costs and estimated earnings in excess of billings on uncompleted contracts (note 2) .....	110,990	34,686
Inventory, at lower of cost and net realizable value .....	41,435	43,910
Prepaid expenses and travel advances .....	5,321	9,922
Total current assets .....	353,125	360,333
FIXED ASSETS (note 5) .....	116,676	99,837

#### OTHER:

Patents and patents pending, at amortized cost (note 2) .....	89,301	84,417
Completed engineering designs, at nominal value .....	1	1
Rent deposits .....	10,213	10,213
Total other assets .....	99,515	94,631

\$569,316

\$554,801

On behalf of the Board:

K. R. OLSEN, Director

R. L. I. FJARLIE, Director

## Liabilities and Shareholders' Equity

### CURRENT LIABILITIES:

	1974	1973
Bank indebtedness (note 3) . . . . .	\$156,715	\$ 56,168
Accounts payable and accrued charges . . . . .	164,137	73,247
Billings in excess of costs and estimated earnings on uncompleted contracts (note 2) . . . . .	56,698	—
Due to Ontario Development Corporation—export support loan (note 6(a)) . . . . .	151,507	117,357
12% convertible notes payable (note 6(b)) . . . . .	—	6,000
Employee income and other taxes payable . . . . .	9,063	4,733
Current portion of venture capital loan . . . . .	7,656	7,078
Total current liabilities . . . . .	545,776	264,583

### NON-CURRENT LIABILITIES:

12% convertible notes payable (note 6(b)) . . . . .	184,050	184,050
Due to Ontario Development Corporation—venture capital loan (note 6(a)) . . . . .	82,476	90,133
Total non-current liabilities . . . . .	266,526	274,183

### MINORITY INTEREST (note 1) . . . . .

### SHAREHOLDERS' EQUITY

#### Share capital (note 7)

##### Authorized:

2,000,000 common shares without nominal or par value

##### Issued:

1,181,667 common shares . . . . .

#### Deficit (statement 2) . . . . .

512,622	512,622
(755,608)	(509,067)
(242,986)	3,555
\$569,316	\$554,801

## Auditors' Report

To the Shareholders of  
FATHOM OCEANOLOGY LIMITED

We have examined the consolidated balance sheet of Fathom Oceanology Limited and its subsidiary as at March 31, 1974, and the consolidated statements of operations and deficit and changes in financial position for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial

position of the companies as at March 31, 1974, the results of their operations and the changes in their financial position for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada  
June 25, 1974

CLARKSON, GORDON & CO.  
Chartered Accountants

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## Consolidated Statement of Operations and Deficit for the year ended March 31, 1974 with comparative figures for 1973

(Statement 2)

	1974	1973
REVENUE .....	\$641,086	\$440,788
COSTS:		
Manufacturing .....	625,170	446,786
Administrative .....	218,850	212,689
Product design (note 4(b)) .....	17,743	—
Interest—long-term .....	29,915	26,049
Interest—short-term .....	18,083	12,255
	909,761	697,779
LESS RECOVERY OF COSTS—		
Grants from Government of Canada:		
D.I.P. program (note 4(a)) .....	(20,039)	(187,537)
I.R.D.I.A. program .....	(2,095)	(40,195)
Net costs .....	887,627	470,047
NET LOSS FOR THE YEAR .....	246,541	29,259
DEFICIT, BEGINNING OF YEAR .....	509,067	479,808
DEFICIT, END OF YEAR .....	<u>\$755,608</u>	<u>\$509,067</u>
NET LOSS PER SHARE .....	<u>\$ .21</u>	<u>\$ .025</u>

(See accompanying notes to Consolidated Financial Statements)

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## Consolidated Statement of Changes in Financial Position for the year ended March 31, 1974 with comparative figures for 1973

(Statement 3)

### FUNDS WERE RECEIVED FROM:

	1974	1973
Proceeds from D.I.P. grant for fixed assets (note 4(a)) . . . . .	\$ 33,679	\$ 12,297
Proceeds from Ontario Development Corporation venture capital loan (net less current portion of \$7,078) . . . . .	—	90,133
Total funds received . . . . .	<u>33,679</u>	<u>102,430</u>

### FUNDS WERE APPLIED TO:

Operations—		
Net loss for the year . . . . .	246,541	29,259
Less charges to operations not involving an outlay of working capital:		
Depreciation and amortization of fixed assets . . . . .	(43,349)	(33,059)
Amortization of patents and patents pending . . . . .	<u>(9,726)</u>	<u>(5,086)</u>
Funds applied to (received from) operations . . . . .	193,466	(8,886)
Reduction of long term debt (note 6(a)) . . . . .	7,657	6,000
Purchase of fixed assets, net . . . . .	93,867	32,286
Cost of patents and patents pending . . . . .	14,610	15,258
Purchase of minority interest in subsidiary (note 1) . . . . .	<u>12,480</u>	<u>—</u>
Total funds applied . . . . .	<u>322,080</u>	<u>44,658</u>
(Decrease) increase in working capital during the year . . . . .	<u>(288,401)</u>	<u>(57,772)</u>
Changes in components of working capital:		
Increase (decrease) in current assets—		
Short term deposit . . . . .	(150,000)	150,000
Amounts receivable . . . . .	73,564	(117,774)
Uncompleted contracts (net) . . . . .	19,606	(59,764)
Other . . . . .	<u>(7,076)</u>	<u>30,754</u>
Increase (decrease) in current liabilities—	<u>(63,906)</u>	<u>3,216</u>
Bank indebtedness . . . . .	100,547	(73,030)
Accounts payable and accrued charges . . . . .	114,220	(105,961)
Ontario Development Corporation . . . . .	<u>9,728</u>	<u>124,435</u>
(Decrease) increase in working capital during the year . . . . .	<u>224,495</u>	<u>(54,556)</u>
WORKING CAPITAL, beginning of year . . . . .	<u>95,750</u>	<u>37,978</u>
WORKING CAPITAL (DEFICIENCY), end of year . . . . .	<u><u>\$ (192,651)</u></u>	<u><u>\$ 95,750</u></u>

(See accompanying notes to Consolidated Financial Statements)

# FATHOM OCEANOLOGY LIMITED

(Incorporated under the laws of Canada)

## Notes to Consolidated Financial Statements March 31, 1974

### 1. Principles of consolidation

The consolidated financial statements include the accounts of Fathom Oceanology Limited and its wholly-owned subsidiary Hale & Associates Limited. According to an agreement with certain of its shareholders, in September 1973 Fathom purchased the shares of Hale & Associates Limited it did not previously own for a cash consideration of \$12,480.

### 2. Accounting practice

The general practice followed by the company for contract work is to record profits on contracts in progress by the percentage of completion method, giving full recognition to losses when they become known. In the case of contracts extending over one or more years, revisions in cost and profit estimates, which can be significant, are reflected in the accounting period in which the relevant facts become known.

The accounting practice followed by the company for research and development costs, excluding costs of patents and patents pending, is to expense these items in the year. The company amortizes the cost of patents and patents pending in a systematic manner, the 1971 costs in proportion to projected sales over the period to March 31, 1978 and subsequent additions evenly over 10 years.

### 3. Bank indebtedness

The bank loan is partially secured by a general assignment of those book debts not assigned to the Ontario Development Corporation. Reference is made to note 6 (a).

### 4. Research and development

- (a) On February 24, 1972, the company contracted with the Government of Canada under the Defence Industries Productivity (D.I.P.) program to continue the design and development of its towing systems. The Department agreed to contribute 50% of defined expenditures by the company on this project before July 1974. This term has now been extended to June 1975. Under the terms of the contract the amount contributed by the Government shall not exceed \$602,500, of which \$20,039 (in respect of operating costs) has been reflected in the statement of operations in 1974 (\$187,537 in 1973 and \$311,169 in 1972) and \$76,255 (in respect of fixed assets) has been reflected as a reduction in the cost of fixed assets on the balance sheet. While the Government is contributing these funds, in certain circumstances it can require partial or complete repayment of the grant. With Government approval, the company, rather than repaying the grants, can reinvest the funds in future development projects.
- (b) Effective April 1, 1973, the company contracted with the Government of Canada under the Program for the Advancement of Industrial Technology (P.A.I.T.) to undertake a specific project for the design of a new towing system. The government agreed to contribute 75% of defined expenditures (estimated to amount to \$74,800) by the company on this project (but not more than \$56,100), of which 25% represents a loan repayable on a royalty basis in the event of any sale of the fully-developed system. To March 31, 1974, the company had incurred costs on this project of \$70,981 of which \$53,238 has been recovered, resulting in a net cost in the year of \$17,743. No portion of the P.A.I.T. grant has been reflected as a potential liability because any sale of the fully-developed system is uncertain at this time.

### 5. Fixed assets

	Original cost	Government grant (note 4(a))	Accumulated depreciation and amortization	Net book value	
				1974	1973
Equipment .....	\$ 55,951	—	\$ 30,650	\$ 25,301	\$25,631
Ship ocean simulator .....	84,711	\$41,633	17,418	25,660	19,567
Leasehold improvements .....	25,638	—	11,059	14,579	17,279
Patterns and tooling .....	162,574	34,622	76,816	51,136	37,360
	<u>\$328,874</u>	<u>\$76,255</u>	<u>\$135,943</u>		
Total fixed assets .....				<u>\$116,676</u>	<u>\$99,837</u>

Reference is made to note 6 (a).

### 6. Loans and notes payable

- (a) Ontario Development Corporation (O.D.C.)—

In 1973 the company entered into an agreement with O.D.C. under which O.D.C. agreed to advance an 8% venture capital loan of \$100,000 and a 6½% export support loan of \$150,000.

The venture capital loan is being repaid over 10 years in blended monthly payments of principal and interest of \$1,206. The export support loan is to provide funds to finance export sales and is repayable on demand.

The loans are secured by:

- chattel mortgage on all equipment owned by the company,
- a floating charge on all other assets (except accounts receivable required to secure any bank loans),
- an assignment and postponement for ten years of 12% convertible notes outstanding as described in note 6 (b),
- an assignment of fire and export insurance policies,
- an assignment of specific accounts receivable related to sales financed under the export support loan program.

(b) 12% convertible notes—

Under the terms of an agreement signed by the noteholders in favour of the Ontario Development Corporation, the 12% convertible notes cannot be redeemed until all loans from the Ontario Development Corporation have been repaid. Reference is made to note 6 (a). The notes are convertible at a price of \$0.60 per share in whole or in part, at the option of the noteholder, into fully-paid and non-assessable shares of the company.

## 7. Share capital

(a) On April 10, 1974, a major Canadian financial institution purchased 297,000 treasury common shares for a net cash consideration of \$178,200. These funds were used to reduce bank indebtedness and to provide working capital. This transaction has not been reflected in the consolidated balance sheet.

(b) Under the terms of a stock option plan, 200,000 shares have been reserved for senior officers (150,000 shares) and key employees (50,000 shares) exercisable at a price equal to 90% of the market value of the shares on the date of granting the options. As at March 31, 1974, the company had granted options to purchase 80,000 shares to three senior officers and 40,000 shares to key employees at an option price of \$0.405. During the year, an option to purchase 5,000 shares previously granted to a key employee expired upon his resignation.

All of the share options are exercisable in the following percentages commencing with the date the option is granted:

	Percentage of original option exercisable
During the 1st year of option	33 1/3%
During the 2nd year of option	66 2/3%
During the 3rd year of option	100%

The company has reserved the following unissued common shares:

For stock options	200,000 shares
For 12% convertible notes payable (note 6 (b))	<u>306,750 shares</u>
	<u>506,750 shares</u>

## 8. Commitment

At March 31, 1974 the company had a commitment under a premises lease to pay rent at an annual rate of approximately \$30,000 up to November 30, 1979.

## 9. Losses carried forward for income tax purposes

The company has incurred losses to March 31, 1974 totalling \$827,000 which can be carried forward for income tax purposes to be applied against any future income of the company within the time limits prescribed by law.

## 10. Statutory information

In accordance with Section 122.2 of the Canada Corporations Act 1970, it is reported that during the year there were nine directors (including two former directors) who received no remuneration as directors and seven officers who received \$100,400 as officers. During the year four directors were also officers.

